

WHAT IS CLAIMED IS:

Sub 17 1. A system capable of performing state-based signaling on  
2 behalf of a stateless client, comprising:

3 a controller, couplable to a state-based terminal, that  
4 translates at least one stateless signaling message received from  
5 said stateless client to at least one state-based signaling message  
6 for presentation to said state-based terminal thereby facilitating  
7 a media stream communications session between said stateless client  
8 and said state-based terminal over an Internet Protocol (IP)-based  
9 network.

2 2. The system as recited in Claim 1 wherein said controller  
3 translates at least one state-based signaling message received from  
4 said state-based terminal to at least one stateless signaling  
5 message for presentation to said stateless client.

2 3. The system as recited in Claim 1 wherein said controller  
3 comprises a protocol engine and a stateless client control engine.

4. The system as recited in Claim 1 wherein said controller  
forms an abstraction of said at least one stateless signaling  
message prior to translating.

5. The system as recited in Claim 1 wherein said system  
performs state-based signaling on behalf of a plurality of  
stateless clients.

6. The system as recited in Claim 1 wherein said media  
stream includes portions selected from the group consisting of:  
voice,  
video, and  
data.

7. The system as recited in Claim 1 wherein portions of said  
media stream traverse a path between said stateless client and said  
state-based terminal without said controller.

8. The system as recited in Claim 1 wherein said at least  
one state-based signaling message and said at least one stateless  
signaling message traverse a signaling path separate from a path  
for said media stream.

9. The system as recited in Claim 1 wherein portions of said media stream traverse a path between said stateless client and said state-based terminal with said controller.

10. The system as recited in Claim 1 wherein said at least one state-based signaling message is based on a protocol selected from the group consisting of:

H.225,

H.235,

H.245, and

H.323.

11. The system as recited in Claim 1 wherein said stateless client is selected from the group consisting of a device having:

an individual telephone,

at least one digital trunk interface,

at least one analog trunk interface,

at least one digital station interface,

at least one analog station interface, and

a shared system resource.

12. The system as recited in Claim 1 wherein said at least  
one stateless signaling message includes an indication selected  
from the group consisting of:

a telephony "off-hook" event,  
a telephony "on-hook" event,  
a telephony "button depressed" event,  
a telephony "digit dialed" event, and  
a "client registration" event.

13. The system as recited in Claim 1 wherein said at least  
one stateless signaling message includes a command selected from  
the group consisting of:

light a specified lamp,  
display text,  
turn a ringer on/off,  
play a specified tone,  
associate button with specified function, and  
connect at least one media stream.

14. The system as recited in Claim 1 wherein said controller  
operates only with respect to call management and management of  
said media stream.



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16. A method of performing state-based signaling on behalf of  
a stateless client, comprising the steps of:  
translating at least one stateless signaling message received  
from said stateless client to at least one state-based signaling  
message for presentation to said state-based terminal thereby  
facilitating a media stream communications session between said  
stateless client and said state-based terminal over an Internet  
Protocol (IP)-based network.

17. The method as recited in Claim 16 further comprising the  
step of translating at least one state-based signaling message  
received from said state-based terminal to at least one stateless  
signaling message for presentation to said stateless client.

18. The method as recited in Claim 16 further comprising the  
step of forming an abstraction of said at least one stateless  
signaling message prior to the step of translating.

19. The method as recited in Claim 16 wherein the method  
performs state-based signaling on behalf of a plurality of  
stateless clients.

20. The method as recited in Claim 16 wherein said media

2 stream includes portions selected from the group consisting of:

3 voice,

4 video, and

5 data.

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21. A system capable of performing state-based signaling on  
2 behalf of a stateless client, comprising:

3 a controller, couplable to a state-based terminal, that  
4 translates at least one state-based signaling message received from  
5 said state-based terminal to at least one stateless signaling  
6 message for presentation to said stateless client thereby  
7 facilitating a media stream communications session between said  
8 stateless client and said state-based terminal over an Internet  
9 Protocol (IP)-based network.

22. The system as recited in Claim 21 wherein said controller  
2 translates at least one stateless signaling message received from  
3 said stateless client to at least one state-based signaling message  
4 for presentation to said state-based terminal.

23. The system as recited in Claim 21 wherein said controller  
2 comprises a protocol engine and a stateless client control engine.

24. The system as recited in Claim 21 wherein said controller  
2 forms an abstraction of said at least one state-based signaling  
3 message prior to translating.



25. The system as recited in Claim 21 wherein said system  
2 performs state-based signaling on behalf of a plurality of  
3 stateless clients.

26. The system as recited in Claim 21 wherein said media  
2 stream includes portions selected from the group consisting of:  
3 voice,  
4 video, and  
5 data.

27. The system as recited in Claim 21 wherein portions of  
2 said media stream traverse a path between said stateless client and  
3 said state-based terminal without said controller.

28. The system as recited in Claim 21 wherein said at least  
2 one state-based signaling message and said at least one stateless  
3 signaling message traverse a signaling path separate from a path  
4 for said media stream.

29. The system as recited in Claim 21 wherein portions of  
2 said media stream traverse a path between said stateless client and  
3 said state-based terminal with said controller.

30. The system as recited in Claim 21 wherein said at least  
one state-based signaling message is based on a protocol selected  
from the group consisting of:

H.225,

H.235,

H.245, and

H.323.

31. The system as recited in Claim 21 wherein said stateless  
client is selected from the group consisting of a device having:

an individual telephone,

at least one digital trunk interface,

at least one analog trunk interface,

at least one digital station interface,

at least one analog station interface, and

a shared system resource.

32. The system as recited in Claim 21 wherein said at least  
2 one stateless signaling message includes an indication selected  
3 from the group consisting of:

4 a telephony "off-hook" event,  
5 a telephony "on-hook" event,  
6 a telephony "button depressed" event,  
7 a telephony "digit dialed" event, and  
8 a "client registration" event.

33. The system as recited in Claim 21 wherein said at least  
2 one stateless signaling message includes a command selected from  
3 the group consisting of:

4 light a specified lamp,  
5 display text,  
6 turn a ringer on/off,  
7 play a specified tone,  
8 associate button with specified function, and  
9 connect at least one media stream.

34. The system as recited in Claim 21 wherein said controller  
2 operates only with respect to call management and management of  
3 said media stream.

35. The system as recited in Claim 21 wherein said system is  
embodied as a sequence of instructions executable in a general  
purpose computer system.

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36. A method of performing state-based signaling on behalf of  
a stateless client, comprising the steps of:  
translating at least one state-based signaling message  
received from said state-based terminal to at least one stateless  
signaling message for presentation to said stateless client thereby  
facilitating a media stream communications session between said  
stateless client and said state-based terminal over an Internet  
Protocol (IP)-based network.

37. The method as recited in Claim 36 further comprising the  
step of translating at least one stateless signaling message  
received from said stateless client to at least one state-based  
signaling message for presentation to said state-based terminal.

38. The method as recited in Claim 36 further comprising the  
step of forming an abstraction of said at least one state-based  
signaling message prior to the step of translating.

39. The method as recited in Claim 36 wherein the method  
performs state-based signaling on behalf of a plurality of  
stateless clients.

40. The method as recited in Claim 36 wherein said media  
stream includes portions selected from the group consisting of:

voice,

video, and

data.

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41. A system capable of performing state-based signaling on behalf of a stateless client, comprising:

a controller, couplable to a state-based terminal, that translates at least one stateless signaling message received from said stateless client to at least one state-based signaling message for presentation to said state-based terminal thereby facilitating a media stream communications session between said stateless client and said state-based terminal over a packet network.

42. The system as recited in Claim 41 wherein said controller translates at least one state-based signaling message received from said state-based terminal to at least one stateless signaling message for presentation to said stateless client.

43. The system as recited in Claim 41 wherein said controller comprises a protocol engine and a stateless client control engine.

44. The system as recited in Claim 41 wherein said controller comprises a call manager messaging interface and a stateless client messaging interface.

45. The system as recited in Claim 41 wherein said controller  
2 forms an abstraction of said at least one stateless signaling  
3 message prior to translating.

46. The system as recited in Claim 41 wherein said system  
2 performs state-based signaling on behalf of a plurality of  
3 stateless clients.

47. The system as recited in Claim 41 wherein said network  
2 employs a transport protocol selected from the group consisting of:  
3 an Internet Protocol (IP),  
4 an Internetwork Packet Exchange/Sequenced Packet Exchange  
5 (IPX/SPX), and  
6 a Systems Network Architecture (SNA).

48. The system as recited in Claim 41 wherein portions of  
2 said media stream traverse a path between said stateless client and  
3 said state-based terminal without said controller.



49. The system as recited in Claim 41 wherein said at least  
2 one state-based signaling message and said at least one stateless  
3 signaling message traverse a signaling path separate from a path  
4 for said media stream.

50. The system as recited in Claim 41 wherein said system is  
2 embodied as a sequence of instructions executable in a general  
3 purpose computer system.

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51. A method of performing state-based signaling on behalf of  
a stateless client, comprising the steps of:

translates at least one stateless signaling message received  
from said stateless client to at least one state-based signaling  
message for presentation to said state-based terminal thereby  
facilitating a media stream communications session between said  
stateless client and said state-based terminal over a packet  
network.

52. The method as recited in Claim 51 further comprising the  
step of translating at least one state-based signaling message  
received from said state-based terminal to at least one stateless  
signaling message for presentation to said stateless client.

53. The method as recited in Claim 51 further comprising the  
step of forming an abstraction of said at least one stateless  
signaling message prior to the step of translating.

54. The method as recited in Claim 51 wherein the method  
performs state-based signaling on behalf of a plurality of  
stateless clients.

55. The method as recited in Claim 51 wherein said network  
2 employs a transport protocol selected from the group consisting of:  
3 an Internet Protocol (IP),  
4 an Internetwork Packet Exchange/Sequenced Packet Exchange  
5 (IPX/SPX), and  
6 a Systems Network Architecture (SNA).

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56. A system capable of performing state-based signaling on  
behalf of a stateless client, comprising:

a controller, couplable to a state-based terminal, that  
translates at least one state-based signaling message received from  
said state-based terminal to at least one stateless signaling  
message for presentation to said stateless client thereby  
facilitating a media stream communications session between said  
stateless client and said state-based terminal over a packet  
network.

57. The system as recited in Claim 51 wherein said controller  
translates at least one stateless signaling message received from  
said stateless client to at least one state-based signaling message  
for presentation to said state-based terminal.

58. The system as recited in Claim 51 wherein said controller  
comprises a protocol engine and a stateless client control engine.

59. The system as recited in Claim 51 wherein said controller  
comprises a call manager messaging interface and a stateless client  
messaging interface.

60. The system as recited in Claim 51 wherein said controller  
2 forms an abstraction of said at least one state-based signaling  
3 message prior to translating.

61. The system as recited in Claim 51 wherein said system  
2 performs state-based signaling on behalf of a plurality of  
3 stateless clients.

62. The system as recited in Claim 51 wherein said network  
2 employs a transport protocol selected from the group consisting of:  
3 an Internet Protocol (IP),  
4 an Internetwork Packet Exchange/Sequenced Packet Exchange  
5 (IPX/SPX), and  
6 a Systems Network Architecture (SNA).

63. The system as recited in Claim 51 wherein portions of  
2 said media stream traverse a path between said stateless client and  
3 said state-based terminal without said controller.

64. The system as recited in Claim 51 wherein said at least  
2 one state-based signaling message and said at least one stateless  
3 signaling message traverse a signaling path separate from a path  
4 for said media stream.

65. The system as recited in Claim 51 wherein said system is  
2 embodied as a sequence of instructions executable in a general  
3 purpose computer system.

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66. A method of performing state-based signaling on behalf of  
a stateless client, comprising the steps of:

translating at least one state-based signaling message  
received from said state-based terminal to at least one stateless  
signaling message for presentation to said stateless client thereby  
facilitating a media stream communications session between said  
stateless client and said state-based terminal over a packet  
network.

67. The method as recited in Claim 66 further comprising the  
step of translating at least one stateless signaling message  
received from said stateless client to at least one state-based  
signaling message for presentation to said state-based terminal.

68. The method as recited in Claim 66 further comprising the  
step of forming an abstraction of said at least one state-based  
signaling message prior to the step of translating.

69. The method as recited in Claim 66 wherein the method  
performs state-based signaling on behalf of a plurality of  
stateless clients.

70. The method as recited in Claim 66 wherein said network  
employs a transport protocol selected from the group consisting of:  
an Internet Protocol (IP),  
an Internetwork Packet Exchange/Sequenced Packet Exchange  
(IPX/SPX), and  
a Systems Network Architecture (SNA).

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71. An Internet Protocol (IP)-based network, comprising:

at least one state-based terminal capable of processing state-based signaling messages;

at least one stateless client capable of processing only stateless signaling messages; and

a server, couplable between said at least one state-based terminal and said at least one stateless client, comprising:

a controller capable of performing state-based signaling on behalf of said at least one stateless client, including:

a stateless client control engine that forms an abstraction of said at least one stateless signaling message received from said at least one stateless client; and

a protocol engine that translates said abstraction to at least one state-based signaling message for presentation to said at least one state-based terminal thereby facilitating a media stream communications session between said at least one stateless client and said at least one state-based terminal.

72. The network as recited in Claim 71 wherein said protocol  
2 engine forms an abstraction of at least one state-based signaling  
3 message received from said at least one state-based terminal, said  
4 stateless client control engine translating said abstraction to at  
5 least one stateless signaling message for presentation to said at  
6 least one stateless client.

73. The network as recited in Claim 71 wherein said  
2 controller further comprises a call manager messaging interface and  
3 a stateless client messaging interface.

74. The network as recited in Claim 71 further comprising a  
2 gateway coupled between an intranet portion and an internet portion  
3 of said network.

75. The network as recited in Claim 71 wherein said  
2 controller is embodied as a sequence of instructions executable in  
3 a general purpose computer system.



77. The network as recited in Claim 76 wherein said stateless  
2 client control engine forms an abstraction of at least one  
3 stateless signaling message received from said at least one  
4 stateless client, said protocol engine translating said abstraction  
5 to at least one state-based signaling message for presentation to  
6 said at least one state-based terminal.

78. The network as recited in Claim 76 wherein said  
2 controller further comprises a call manager messaging interface and  
3 a stateless client messaging interface.

79. The network as recited in Claim 76 further comprising a  
2 gateway coupled between an intranet portion and an internet portion  
3 of said network.

80. The network as recited in Claim 76 wherein said  
2 controller is embodied as a sequence of instructions executable in  
3 a general purpose computer system.

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